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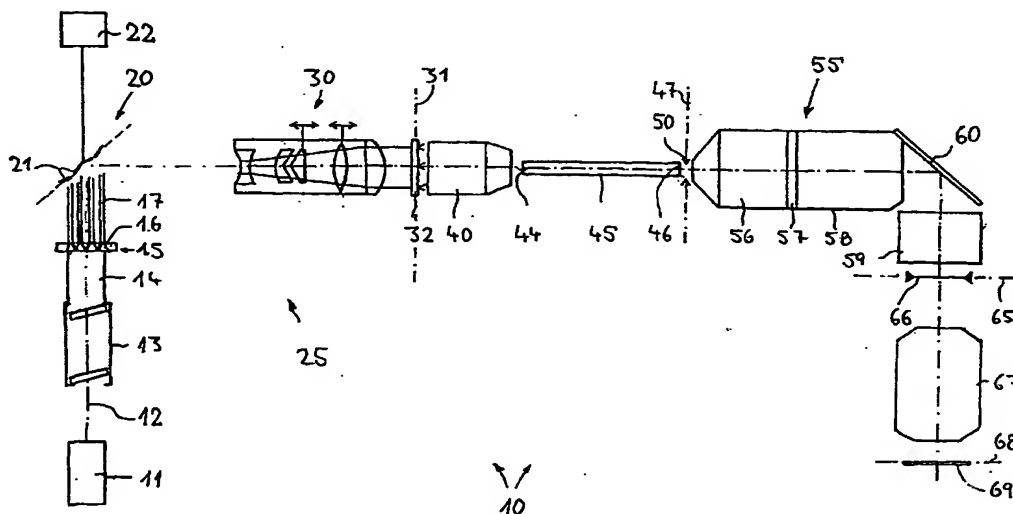
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(54) Title: **ILLUMINATION SYSTEM FOR A MICROLITHOGRAPHY PROJECTION EXPOSURE INSTALLATION**



(57) Abstract: An illumination system for a microlithography projection exposure installation is used to illuminate an illumination field with the light from a primary light source (11). The illumination system has a light distribution device (25) which receives light from the primary light source and, from this light, produces a two-dimensional intensity distribution which can be set variably in a pupil-shaping surface (31) of the illumination system. The light distribution device has at least one optical modulation device (20) having a two-dimensional array of individual elements (21) that can be controlled individually in order to change the angular distribution of the light incident on the optical modulation device. The device permits the variable setting of extremely different illuminating modes without replacing optical components.



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